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## W. Kerr Scott Dam and Reservoir

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### Prescribed Burn Held at Ft. Hamby Wildlife Management Area

The team at W. Kerr Scott Lake led by Ranger Brad Carey and supported heavily by the NC Forest Service conducted the first controlled burn in W. Kerr Scott history at Fort Hamby Wildlife Management Area on March 31, 2010. Shown below are during and after pictures from the burn. A second burn was conducted on April 22 at Boomer Wildlife Area. To understand more about the benefits of prescribed burning, see the information from the North Carolina Forestry Service on page 3.



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Native Americans used fire in virgin pine stands to provide better access, improve hunting, and ridding the land of undesirable species so they could farm. Early North American settlers observed this and continued the practice of using fire as a beneficial agent.

# What is a Grandfather Clause?

Permits/licenses that were issued under and meet the requirements of a past Shoreline Management Plan but do not meet the current Shoreline Management Plan will be considered as prior commitments and placed under a "Grandfather Clause." These facilities can remain as long as the holder of the permit/license is in compliance with the terms and conditions of the existing permit/license. These facilities have to be maintained in a safe and structurally sound condition and can remain as permitted until a transfer of ownership occurs or the death of the permittee and his/her legal spouse. At this time, the permit becomes null and void and the existing facility must be removed. Any adjacent landowner applying for a permit must be in compliance with the present Shoreline Management Plan.

Grandfather Clauses are sometimes confusing to the general public in shoreline management related activities at W. Kerr Scott Reservoir. To reduce these problems and to improve public awareness and administrative efficiency, a gradual phase-out is planned for these activities. Phase-out of grandfather facilities and activities will be accomplished as follows:

1. Docks and Associated Structures. Docks legally permitted prior to the 1997 Shoreline Management Plan and located in areas other than Limited Development Areas will be considered "Grandfathered". Grandfathered floating facilities will be allowed to remain as permitted in their present locations in accordance with Public Law 99-662, Section 1134 (d). This law prohibits the forced removal, on or after December 31, 1989, of the previously authorized docks and appurtenant structures which were in place on November 17, 1986, providing the following conditions are met:

- a. Docks must be maintained in usable and safe conditions at all times.
- b. Such property does not occasion a threat to life or property
- c. The holder of the permit is in substantial compliance with the terms of the existing permit.
- d. Public Law 99-662 applies except where necessary for immediate use for public purposes, or higher public use, or for a navigation or flood control project.

2. Land-based Facilities. All authorized land-based facilities, such as steps, walkways, and utility lines permitted prior to this plan and located in areas other than Limited Development are considered "grandfathered". Land-based facilities must be removed at the expense of the permittee should the Shoreline Use Permit/License be terminated for any reason.

3. Vegetation Modification. Due to significant changes in the terms and conditions of permits issued in the past, many old permits issued before this plan are "grandfathered". This condition will remain as permitted until a transfer of ownership occurs or the death of the permittee and his/her legal spouse. The new owner applying for a permit must conform to the current Shoreline Management Plan.

4. Mowed Lawns. No new development of lawns is permitted. Existing lawns developed prior to the 2006 Shoreline Management Plan will be "grandfathered" as long as they meet the requirements, outlined in earlier revisions of the shoreline management plan. This allows certain mowing activities to occur legally on public lands. All persons legally mowing public property are required to have a Shoreline Use Permit authorizing such mowing. These activities will remain permitted until a transfer of ownership occurs or the death of the permittee and his/her legal spouse. The new owner applying for a permit must conform to the current Shoreline Management Plan.

When ownership changes occur on adjacent private property, reforestation and regeneration will occur in these mowed open areas. Mowing will no longer be permitted in these areas. These areas will be gradually converted to their natural vegetative state by planting and thorough natural regeneration. The government has the right at any time to plant trees and vegetation that will help restore these areas to their natural vegetative state. If any permittee wishes to plant vegetation, they will need to obtain prior approval from the Operations Manager. Only native materials will be considered for planting on government property.





## FORESTRY Leaflets

March 2009

FM-11

### Benefits of Prescribed Burning

Prescribed burning (also known as 'controlled burning') is an important forest management tool that may be appropriate to use throughout the life cycle of a stand of trees. Some of the more frequent and beneficial uses of prescribed burning are briefly outlined in this leaflet. While prescribed burning historically is a low-cost forestry practice when compared to other management treatments, cost-share payment assistance may be available in some cases. Prescribed burning: (1) must adhere to the burn permit laws; (2) should only be conducted by a qualified professional; and (3) should occur during days in which the weather and air conditions are favorable. To learn more, contact your County Forest Ranger.

#### Site preparation ('site prep') burns

- Removes excessive woody debris and undesirable vegetation to make room for natural regeneration or planting tree seedlings.
- Woody debris may be piled and then burned. If the woody debris substantially covers the entire tract, the material may be burned while in-place (referred to as 'broadcast burned').
- Site prep burns may be conducted prior to tree planting as a follow-up to a herbicide treatment that inhibits undesirable or competing vegetation.
- Burns are usually performed during late spring or summer.

#### Hazard reduction burns

- Conducted within a stand of existing timber, usually pine timber. In stands of hardwood timber, seek advice from a forestry professional to determine if burning is suitable.
- Reduces the fuel-load of understory trees, shrubs, vines, leaves and needles to limit the potential hazard of wildfire in a controlled manner.
- Allows increased sunlight to reach the ground, which promotes fresh growth of low-growing shrubs, native grasses, and herbaceous plants that benefit wildlife.
- Burns are usually performed in late fall or winter to take advantage of lower air temperatures, increased humidity and adequate soil moisture. Sometimes burns are even performed at night.

#### Silvicultural / Ecological ('warm season' or 'growing season') burns

- Intended to mimic natural fire occurrence during the growing season in a stand of existing timber. In fact, some tree species (longleaf pine, pond pine) require frequent prescribed burns to establish and thrive.
- When managing pine timber, this type of burn can control and inhibit competing hardwood trees.
- Burns may naturally kill weakened or diseased trees, thereby allowing more growing space for the remaining healthier, vigorous crop trees in the timber stand.
- Must be conducted carefully as there is usually a greater potential to damage or scorch the residual overstory stand of timber.



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# Know W. Kerr Scott Lake Buoys



## CHANNEL MARKERS

There are ten red and white striped channels marker buoys on W. Kerr Scott Lake marked 1 through 10. These buoys indicate that any vessel should not pass between the shore and the buoy.



## DANGER BOATS KEEP OUT

Boats are not allowed in certain areas. These locations are at the Dam Intake Structure and within Swimbeach Areas marked by buoys and signs on shore.



## CONTROLLED SKI AREA

In areas determined to be unsafe for waterskiing, no ski zones have been designated by placing "End Ski" buoys. Beyond these areas skiing and towing a person on a tube, regardless of speed is not allowed.



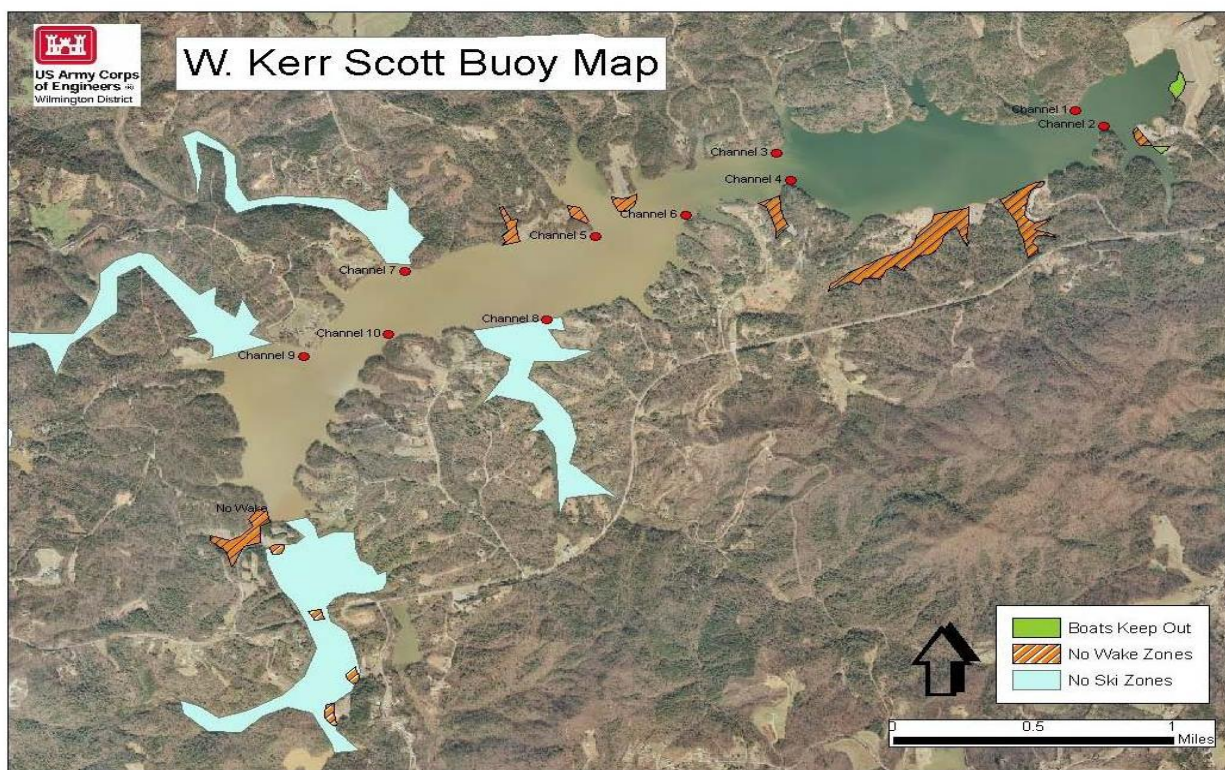
## INFORMATION FISH ATTRACTOR

The staff at W. Kerr Scott Lake periodically adds recycled Christmas trees to the lake to form fish habitat. These areas are marked with fish attractor buoys.



## CONTROLLED SPEED NO WAKE

No wake zones are marked by buoys and locations are shown on the map. Boaters should slow to idle speed in these areas and not create a wake behind the boat.



## National Pollination Week ~ June 21-27

**P**ollination is very important. It leads to the creation of new seeds that grow into new plants.

Flowering plants have several different parts that are important in pollination. Flowers have male parts called stamens that produce a sticky powder called pollen. Flowers also have a female part called the pistil. The top of the pistil is called the stigma, and is often sticky. Seeds are made at the base of the pistil, in the ovule.

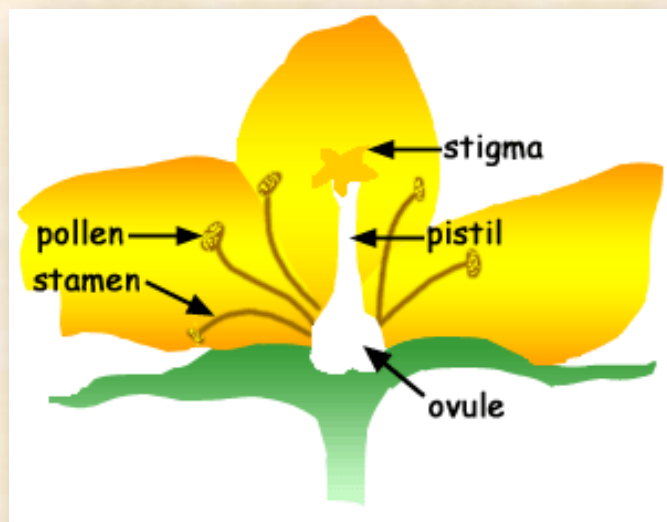
Plants that are pollinated by animals often are brightly colored and have a strong smell to attract the animal pollinators.

Another way plants are pollinated is by the wind. The wind picks up pollen from one plant and blows it onto another.

Plants that are pollinated by wind often have long stamens and pistils. Since they do not need to attract animal pollinators, they can be dully colored, unscented, and with small or no petals since no insect needs to land on them.

To be pollinated, pollen must be moved from a stamen to the stigma. When pollen from a plant's stamen is transferred to that same plant's stigma, it is called self-pollination. When pollen from a plant's stamen is transferred to a different plant's stigma, it is called cross-pollination. Cross-pollination produces stronger plants.

The plants must be of the same species. For example, only pollen from a daisy can pollinate another daisy. Pollen from a rose or an apple tree would not work.



Pollination occurs in several ways. People can transfer pollen from one flower to another, but most plants are pollinated without any help from people. Usually plants rely on animals or the wind to pollinate them.

When animals such as bees, butterflies, moths, flies, and hummingbirds pollinate plants, it's accidental. They are not trying to pollinate the plant. Usually they are at the plant to get food, the sticky pollen or sweet nectar made at the base of the petals. When feeding, the animals accidentally rub against the stamens and get pollen stuck all over themselves. When they move to another flower to feed, some of the pollen can rub off onto this new plant's stigma.



# Help the Pollinators!



## Tips to Attract Pollinators

- Create a shallow depression in the mud or place a shallow dish of water in your garden for insect pollinators to drink—but make certain they can climb out. Some pollinators, including butterflies, also can benefit from discarded fruit.
- Leave large branches that fall in wooded areas, or bundles of hollow reeds or stems around your yard to attract native bees and other insect pollinators. Drilling long holes in large branches or logs can make it more inviting for some species to nest.
- Avoid pesticides or, if necessary, apply pesticides only for problematic target species and when most pollinators are inactive. Pesticides are largely toxic to most pollinators.

## General Water Safety Tips

- Learn to swim. The best thing anyone can do to stay safe in and around the water is to learn to swim. Always swim with a buddy; never swim alone. The American Red Cross has swimming courses for people of any age and swimming ability. To enroll in a swim course, contact your local Red Cross chapter.
- Swim in areas supervised by a lifeguard.
- Read and obey all rules and posted signs.
- Children or inexperienced swimmers should take precautions, such as wearing a U.S. Coast Guard-approved personal flotation device (PFD) when around the water.
- Set water safety rules for the whole family based on swimming abilities (for example, inexperienced swimmers should stay in water less than chest deep).
- Be knowledgeable of the water environment you are in and its potential hazards, such as deep and shallow areas, currents, depth changes, obstructions and where the entry and exit points are located. The more informed you are, the more aware you will be of hazards and safe practices.
- Pay attention to local weather conditions and forecasts. Stop swimming at the first indication of bad weather.
- Use a feet-first entry when entering the water.
- Enter headfirst only when the area is clearly marked for diving and has no obstructions.
- Do not mix alcohol with swimming, diving or boating. Alcohol impairs your judgment, balance, and coordination, affects your swimming and diving skills, and reduces your body's ability to stay warm.
- Know how to prevent, recognize, and respond to emergencies.





## PUBLIC URGED TO LEAVE FAWNS ALONE

**RALEIGH, N.C. (May 11, 2010)** – The N.C. Wildlife Resources Commission is imploring people not to approach, touch, feed or move white-tailed deer fawns this spring.

Most fawns are not abandoned, though people who see them often think they are and attempt to rescue them. Contact with a human may harm the animal more than help it.

Whitetails are a “hider” species, which means the female will hide her fawn in vegetation during the first two or three weeks of its life as she feeds. Spotted and lacking scent, fawns are well-camouflaged and usually remain undetected by predators. The doe will return to the fawn several times a day to nurse and clean it, staying only a few minutes each time before leaving again to seek food. A human may never see the doe and think the fawn needs help or food. But staying away is a better option.

The fawn is well-equipped to protect itself. By the time it is 5 days old, already it can outrun a human. At 3 to 6 weeks of age, fawns can escape most predators.

Unless a fawn is in imminent danger — for example, under attack by dogs or injured in a tractor mowing accident — the best decision always is to leave it alone. If you are concerned about the fawn, leave the area and come back to check on the fawn the next day. Do not remain in the area. Does are very cautious and will not approach a fawn if they sense danger.

If a fawn is in the exact location when you check on it the following day and bleating loudly, or if a fawn is lying beside a dead doe (likely at the side of a highway), do not take the fawn into your possession. It is illegal to remove a fawn from the wild. Only fawn rehabilitators with a permit from the Commission may keep white-tailed fawns in captivity for eventual release. Instead, contact the Wildlife Resources Commission at (919) 707-0040 for the telephone number of a local, permitted fawn rehabilitator or see a list of fawn rehabilitators at [www.ncwildlife.org](http://www.ncwildlife.org).





# North Carolina Weather Extremes

The State Climate Office of North Carolina is the primary source for NC weather and climate information and is involved in all aspects of climate research, education, and extension services. The State Climate Office is a public-service center, part of the UNC system, housed at North Carolina State University.

<u>Event</u>		<u>Location</u>	<u>Date/Time Period</u>
HIGHEST TEMPERATURE OF RECORD	110° F *	Fayetteville, Cumberland County	August 21, 1983
LOWEST TEMPERATURE OF RECORD	-34° F (below zero)	Mount Mitchell, Yancey County	January 21, 1985
GREATEST 24-HOUR RAINFALL	22.22 inches	Altapass, Mitchell County	July 15-16, 1916
GREATEST 24-HOUR SNOWFALL	36 inches	Mount Mitchell, Yancey County	March 13, 1993
GREATEST SINGLE STORM SNOWFALL	60 inches*	Newfound Gap, Swain County, Great Smoky Mountains National Park (unofficial)	April 2-6, 1987 *
	50 inches	Mount Mitchell, Yancey County	March 12-14, 1993
WARMEST WEATHER STATION **	63.8° F	Wilmington, New Hanover County	annual average
COLDEST WEATHER STATION **	43.8° F	Mount Mitchell, Yancey County (on mountain top)	annual average
	48.8° F	Banner Elk, Avery County (in a valley where people actually live)	annual average
WETTEST WEATHER STATION **	91.72 inches	Lake Toxaway, Transylvania County	annual average
DRIEST WEATHER STATION **	37.32 inches	Asheville (Downtown), Buncombe County	annual average
MAXIMUM SINGLE STATION PRECIPITATION FOR ANY CALENDAR YEAR	129.60 inches	Rosman, Transylvania County	1964
MINIMUM SINGLE STATION PRECIPITATION FOR ANY CALENDAR YEAR	22.69 inches	Mount Airy, Surry County	1930

\* Obtained from RDU public Statement March 2, 1988

\*\* Based on 1971-2000 Normals

**Bloodroot (*Sanguinaria canadensis*)**



**Plant Type:** This is a herbaceous plant, it is a perennial which can reach 10 inches in height. Only about half that high at the time of blooming.

**Leaves:** This plant has basal leaves only. Leaves can be as wide as 8 inches. There is usually only one leaf which has five to nine lobes. It is much smaller at the time the flower is open.

**Flowers:** The flowers have numerous parts and are up to 2 inches wide. They are white with yellow center. Blooms first appear in late winter and continue into early spring. The flower usually has eight symmetrically arranged petals four large and four smaller, but can have up to twelve and sometimes sixteen.

**Fruit:** A two part capsule pointed on both ends with a row of seeds in each half.

**Habitat:** Rich woods. Usually found growing on banks or slopes.

**Range:** Most of North America east of the Rocky Mountains.





## Mourning Dove

North Carolina Wildlife Profiles



### Mourning Dove

*Zenaida macroura*

In the early mornings of late January and early February, mourning doves in North Carolina begin cooing and making their circling courtship flights. Mourning doves, often seen migrating in large flocks, begin to break up and form pairs. Named for their long tails and melancholy bird call, mourning doves have been classified as a game bird by the federal government and 39 states, including North Carolina. Also known as the Carolina dove, the Socorro dove and Grayson's dove, it is the only game bird to nest in all 48 connecting states of the United States. A member of the pigeon family, this beautiful bird with a long-pointed tail has probably been seen by everyone in North Carolina.

### Description

The mourning dove has a thin, delicate-looking bill, a neat head, and a long, graduated tail bordered with large white spots. The colors of the female are duller than the gray-brown adult males. At close range, adult males can be distinguished by purple-pink iridescent feathers on the neck and light pink on the breast. The upper part of the throat is whitish. Legs and feet are dull red or purplish red.

The mourning dove's flight is swift and darting, while the wings make a whistling sound. The mourning dove has been timed at a flight speed of 30-55 mph.

Named for its distinctive voice, the mourning dove has three basic calls. The advertising coo has a very clear but somewhat sad tone. The display coo is the same except with greater intensity. The nest coo is the same as the advertising call except louder.

### History and Status

Large groups of doves live in North, South and Central America. The mourning dove is well-known and common throughout the United States. Before it became extinct, the passenger pigeon belonged to this group that also contains the rock dove or common pigeon. Mourning doves are relatively easy to approach at all seasons, unlike the wild turkey or Northern bobwhite.

Often large numbers of doves gather at good feeding grounds and communal roosts. Unless overhunted, the mourning dove will continue to reproduce and expand in large numbers because human alteration of habitat creates good dove habitat. The clearing and cultivation of fields create edges between different habitats, and doves, like most wildlife species, thrive in edges. Doves are able to exploit large crop fields, unlike some game species that require a diverse habitat.

The mourning dove has the longest mating season of any bird in the U.S.  
March–September



### Range and Distribution

Mourning doves nest from southeast Alaska and southern Canada south to Baja, California through Mexico to Panama. They also range from California to the East Coast. Adult mourning doves live about two years in the wild. Some cases, however, have noted a life span of five, seven, and 10 years.

### Range Map



In North Carolina, the mourning dove can be found statewide.

# Mourning Dove

Wildlife Profiles—North Carolina Wildlife Resources Commission

## Habitat and Habits

Mourning doves have a strong tendency to return to the same area from one year to the next. They alternately feed and nest during the day and flock to some regular watering place late in the afternoon. There are fewer mourning doves in North Carolina during October and November than at any other time of the year. Large movements and instability among flocks of young birds in June and July have also been noted. Flocks as large as 150 birds disappear from one day to the next. The largest dove populations of the year occur in August and September during the fall migration.

Egg-laying begins in March and persists into September—the longest nesting season of any bird in the United States. The mourning dove nests in wooded edges of fields, pastures, open areas, forests and suburban areas. The favorite nesting trees are loblolly pine and shortleaf pine. Nests are constructed primarily of small twigs and are not very elaborate. Ground nesting in North Carolina occurs only on the treeless islands at the edge of the ocean.

Complete nesting requires about one month from constructing the nest and egg-laying to the exit of the young. Half of all nesting attempts end in failure. Successful nesting averages about three broods per summer. Mourning doves lay two white eggs that hatch in 14 days. After hatching, the young are fed crop milk for about three days and then fed seeds. Crop milk is a special secretion produced in the gullets of both parents and is very nutritious for young doves. The young grow rapidly and leave the nest in about two weeks. After only a week more, the young are completely independent.

Largely seed eaters, these soft-footed birds do not scratch for their food so the seeds must be plainly visible and readily accessible. Mourning doves feed mostly on weed seeds and waste grain from cultivated fields.



## Wild Facts

### Classification

Class: Aves

Order: Columbiformes

### Average Size

Length: 11–13 in. long

Wingspread: 17–19 in.

Tail: 5 1/2–7 in.

### Food

Seeds of grass, waste grain buckwheat, peanuts, cowpeas, seeds of pine, dove weed, pokeberry, some insects and snails. 98 percent of diet is seeds.

### Breeding

Monogamous; paired for life. 2–5 broods in a nesting season, more in the South because of the warm climate; some doves may nest every month of the year in the South.

### Young

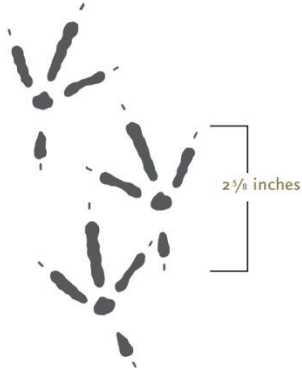
Called squabs. Usually two eggs, pure white. Incubated by both sexes, male by day, female by night. Young fed and brooded by both. Young fly directly from nest 14–15 days after hatching. Chicks are on their own within a week after leaving nest. Sexually mature in the spring following summer birth.

### Life Expectancy

55 to 75 percent of juveniles do not survive first year. Adult mortality is about 55 percent annually.

## People Interactions

The mourning dove is one of the most popular game birds in North Carolina. The opening of dove-hunting season in early September signals the beginning of the hunting season for thousands of Tar Heels. The dove is also valuable to humans because it eats the seeds of weed species, and bird watchers enjoy them at bird feeders. Because the bird is such a prolific breeder, properly regulated hunting has no negative effect on the dove population.



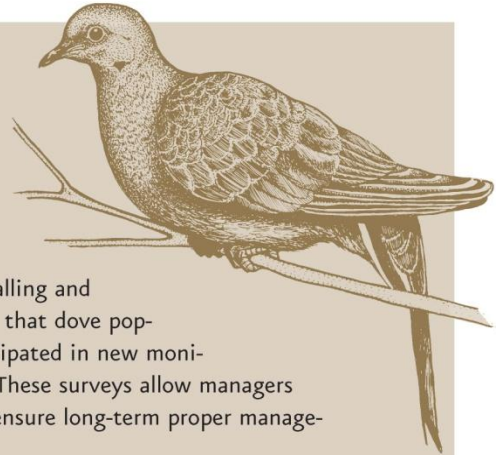


# Mourning Dove

## Wildlife Profiles—North Carolina Wildlife Resources Commission

### NCWRC Interaction

Mourning dove populations are monitored by the North Carolina Wildlife Resources Commission and other state agencies through several surveys. The long-standing call-count survey is conducted throughout the United States and tracks long-term population trends. Approximately 20 of the surveys are conducted in North Carolina. The survey is a 20-mile motor route, with stops each mile for three minutes. An observer records the number of doves heard calling and observed. Results of the survey in the eastern United States suggest that dove populations have been relatively stable. Recently, the Commission participated in new monitoring surveys involving large-scale leg banding of mourning doves. These surveys allow managers to make optimal decisions regarding hunting season regulations to ensure long-term proper management of this important resource.



### Q&A

#### 1. How do mourning doves feed their young?

After hatching, the young are fed crop milk for about three days and then seeds. Crop milk is a special secretion produced in the gullets of both parents and is very nutritious for young doves.

#### 2. Why do mourning doves continue to reproduce and expand in large numbers?

Unless they are overhunted, mourning doves will continue to reproduce and expand their numbers because human alteration of habitat creates good dove habitat. Clearing and cultivating fields creates edges between different habitats, and doves, like most wildlife species, thrive in edges. Doves are able to exploit large crop fields, unlike some game species that require a diverse habitat.

#### 3. How are mourning dove populations monitored?

Mourning dove populations are monitored by the North Carolina Wildlife Resources Commission, the U.S. Fish & Wildlife Service and other state agencies through several surveys to track long-term population trends. Approximately 20 call-count surveys are conducted in North Carolina. The survey is a 20-mile motor route with stops at one-mile intervals. For three minutes at each interval, an observer records the number of doves heard calling and the total number of doves observed. Results of the call-count survey in the eastern United States suggest that dove populations have been relatively stable over the long term.

### Links

To watch mourning dove video and listen to the call, go to [http://allaboutbirds.org/guide/Mourning\\_Dove/video](http://allaboutbirds.org/guide/Mourning_Dove/video).

### References

- Delacour, Jean T. *Wild Pigeons and Doves* (All Pet Books, Inc., 1959).  
Goodwin, Derek. *Pigeons and Doves of the World* (Comstock Pub., 1983).  
Quay, Thomas. *Mourning Dove Populations in North Carolina* (N.C. Wildlife Resources Commission, 1954).

### Credits

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## Composting

*Composting turns household wastes into valuable fertilizer and soil organic matter.*

### In your backyard

All organic matter eventually decomposes. Composting speeds the process by providing an ideal environment for bacteria and other decomposing microorganisms. The final product, humus or compost, looks and feels like fertile garden soil. This dark, crumbly, earthy-smelling stuff works wonders on all kinds of soil and provides vital nutrients to help plants grow and look better.

Decomposing organisms consist of bacteria, fungi, and larger organisms such as worms, sow bugs, nematodes, and numerous others. Decomposing organisms need four key elements to thrive: nitrogen, carbon, moisture, and oxygen. For best results, mix materials high in nitrogen (such as clover, fresh grass clippings, and livestock manure) and those high in carbon (such as dried leaves and twigs). If there is not a

good supply of nitrogen-rich material, a handful of general lawn fertilizer will help the nitrogen-carbon ratio. Moisture is provided by rain, but you may need to water or

cover the pile to keep it damp. Be careful not to saturate the pile. Turning or mixing the pile provides oxygen. Frequent turning yields faster decomposition.



*Composting can be as simple or involved as you would like. It depends on how much yard waste you have and how fast you want results.*

*Backyard Conservation*

**is a cooperative project of:**

**USDA Natural Resources Conservation Service**

**National Association of Conservation Districts**

**Wildlife Habitat Council**

April 1998

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**One in a series of 10 tip sheets on backyard conservation**



## Getting started

Many materials can be added to a compost pile, including leaves, grass clippings, straw, woody brush, vegetable and fruit scraps, coffee grounds, livestock manure, sawdust, and shredded paper. Do not use diseased plants, meat scraps that may attract animals, or dog or cat manure which can carry disease. Composting can be as simple or as involved as you would like, and depends on how much yard waste you have, how fast you want results, and the effort you are willing to invest.

## Cold or slow composting

With cold or slow composting, you can just pile grass clippings and dry leaves on the ground or in a bin. This method requires no maintenance, but it will take several months to a year or more for the pile to decompose. Cold composting works well if you don't have time to tend the compost pile at least every other day, have little yard waste, or are not in a hurry to use the compost.

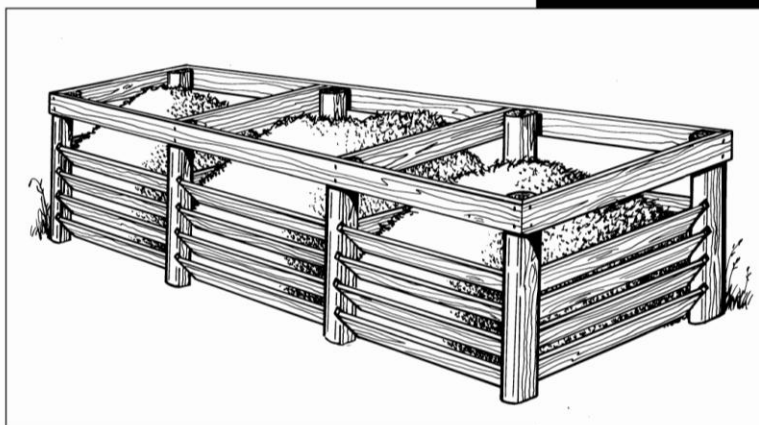
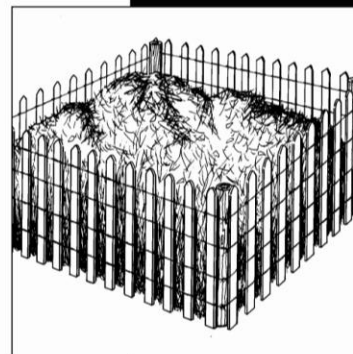
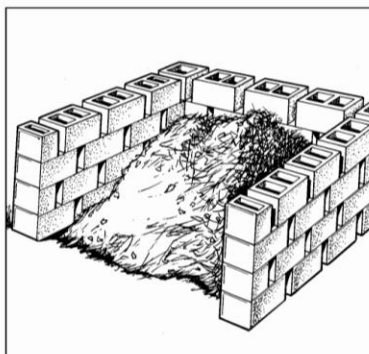
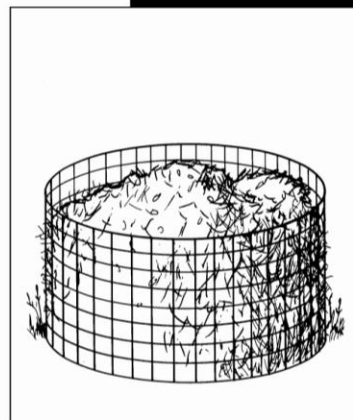
Keep weeds and diseased plants out of the mix since the temperatures reached with cold composting may not be high enough to kill the weed seeds or disease-causing organisms. Add yard waste as it accumulates. Shredding or chopping speeds up the process. To easily shred material, run your lawn mower over small piles of weeds and trimmings.

Cold composting has been shown to be better at suppressing soil-borne diseases than hot composting. Cold composting also leaves more unde-composed bits of material, which can be screened out if desired.

## Hot composting

Hot composting requires more work, but with a few minutes a day and the right ingredients you can have finished compost in a few weeks depending on weather conditions. The composting season coincides

*Compost bins may be (clockwise from left) as simple as a ventilated garbage can; built with wire mesh; picket fence; pressure treated wood; brick or concrete blocks; and other materials.*



with the growing season. When conditions are favorable for plant growth, those same conditions work well for biological activity in the compost pile. However, since compost generates heat, the process may continue later into the fall or winter.

Hot piles do best when high-carbon material and high-nitrogen material are mixed in a 1 to 1 ratio. A pile with the minimum dimensions of 3' x 3' x 3' is needed for efficient heating. For best heating, make a heap that is 4 or 5 feet in each dimension. As decomposition occurs, the pile will shrink. If you don't have this amount at one time, simply stockpile your materials until a sufficient quantity is available for proper mixing.

Hot piles reach 110 to 160 degrees Fahrenheit, killing most weed seeds and plant diseases. Studies have shown that compost produced at these temperatures has less ability to suppress diseases in the soil since these temperatures may kill some of the beneficial bacteria necessary to suppress disease.

Steps for hot composting:

1. Choose a level, well-drained site, preferably near your garden.
2. There are numerous styles of compost bins available depending on your needs. These may be as simple as a moveable bin formed by wire mesh or a more substantial structure consisting of several compartments. (See diagrams.) There are many commercially available bins. While a bin will help contain the pile, it is not absolutely necessary. You can build your pile directly on the ground. To help with aeration, you may want to place some woody material on the ground where you will build your pile.
3. To build your pile, either use alternating layers of high-carbon

and high-nitrogen material or mix the two together and then heap into a pile. If you alternate layers, make each layer 2 to 4 inches thick. Some composters find that mixing the two together is more effective than layering. Use approximately equal amounts of each. If you are low on high-nitrogen material, you can add a small amount of commercial fertilizer containing nitrogen. Apply at a rate of  $\frac{1}{2}$  cup of fertilizer for each 10-inch layer of material. Adding a few shovels of soil will also help get the pile off to a good start; soil adds commonly found decomposing organisms.

4. Water periodically. The pile should be moist but not saturated. If conditions are too wet, anaerobic microorganisms (those that can live without oxygen) will continue the process. These are not as effective or as desirable as the aerobic organisms. Bad odors are also more likely if the pile is saturated.
5. Punch holes in the sides of the pile for aeration.
6. The pile will heat up and then begin to cool. Start turning when the pile's internal temperature peaks at about 130 to 140 degrees Fahrenheit. You can track this with a compost thermometer, or reach into the pile to determine if it is uncomfortably hot to the touch.
7. During the composting season, check your bin regularly to assure optimum moisture and aeration are present in the material being composted.
8. Move materials from the center to the outside and vice versa. Turn every day or two and you should get compost in less than 4 weeks. Turning every other week

will make compost in 1 to 3 months. Finished compost will smell sweet and be cool and crumbly to the touch.

### Common problems

Composting is not an exact science. Experience will tell you what works best for you. If you notice that nothing is happening, you may need to add more nitrogen, water, or air. If things are too hot, you probably have too much nitrogen. Add some more carbon materials to reduce the heating. A bad smell may also indicate too much nitrogen.

Cold composting often proceeds faster in warmer climates than in cooler areas. Cold piles may take a year or more to decompose depending on the materials in the pile and the conditions.

Adding kitchen wastes to compost may attract flies and insects. To prevent this problem, make a hole in the center of your pile and bury the waste. Do not compost meat scraps, dead animals, pet manure, diseased plant material, or noxious weeds.

Check on any local or state regulations for composting in urban areas—some communities may require rodent-proof bins.

### Vermicomposting

Vermicomposting uses worms to compost. This takes up very little space and can be done year-round in a basement or garage. It is an excellent way to dispose of kitchen wastes.

Steps for vermicomposting:

1. You need a plastic storage bin. One 1' x 2' x 3.5' will be enough to meet needs of a family of 6.
2. Drill 8 to 10 holes, approximately 1/4" in diameter, in the bottom of the bin for drainage.



3. Line the bottom of the bin with fine nylon mesh to keep the worms from escaping.
4. Put a tray underneath to catch the drainage.
5. Shredded newspaper works well as bedding. Rip into pieces and water well so that it is thoroughly moist. Place on one side of your bin. Do not let it dry out.
6. Add worms to your bin.  
Redworms are recommended for best composting, but other species can be used. Redworms are the common small worms found in most gardens and lawns. You can collect them from under a pile of mulch or order them from a garden catalog.
7. Provide worms with food wastes such as vegetable peelings. Do not add fat or meat products. Limit feed- too much at once may cause the material to rot.
8. Keep the bin in a dark location away from extreme temperatures.
9. In about 3 months the worms should have changed the bedding and food wastes into compost. At this time add fresh bedding and more food to the other side of the bin. The worms should migrate to the new food supply.
10. After a couple of weeks, open your bin in a bright light. The worms will burrow into the bedding. Scoop out the finished compost and apply to your plants or save for use in the spring.

## Using compost

Compost can be used for all your planting needs. Compost is an excellent source of organic matter to add to your garden or potted plants. It helps improve soil structure which contributes to good aeration and moisture-holding capacity.

Compost is a source of plant nutrients. Compost can also be used as a mulch material. Studies have shown that compost used as a mulch, or mixed with the top one-inch layer of soil, can help prevent some plant diseases, including some of those that cause damping of seedlings.

## On the farm

On the farm, potential waste is turned into a resource that saves money and helps the environment. Producers use livestock manure to fertilize crops. When manure is properly handled, it can be safely applied to the land without the risk of polluting water. Composting is also practiced in some poultry operations. The compost is used as fertilizer on the farms and for lawns and gardens.

### District hosts public scoping meeting on wind turbine proposal



**Manteo, North Carolina:** Wind turbines in Pamlico Sound. Is that a good idea? A bad idea? Something that needs more detailed exploration?

What do you think Duke Power and UNC should do to meet the needs of the natural and human environment before they undertake a demonstration project to place up to three wind turbines in the Pamlico Sound? Those are the questions the U.S. Army Corps of Engineers asks the public as it prepares to oversee the NEPA process and an Environmental Impact Statement (EIS).

The proposed project is intended to test the viability of wind power in coastal North Carolina waters. Duke Power and its partner, UNC, seek to learn whether this is a good way to move toward renewable energy, whether our coastal hurricanes and nor'easters are an obstacle to success, and whether the technical and operational challenges of placing such large structures in our coastal waters can be met.

Dave Lekson, Chief of the Washington, North Carolina, Regulatory Office, is the project manager for this Corps oversight of the EIS effort. "We are at the very beginning. The first people we hear from are the public and the natural resource agencies who must comment in any EIS."

About seventy five citizens from the surrounding area came to the public meeting. They heard brief presentations from the Corps and from Duke Power, but most of the evening was devoted to hearing their comments and concerns. The public articulated wide-ranging and well-thought-out questions. How would the one to three structures, up to 440 feet tall from the base to the tip of a rotating blade, affect fisheries, bird life, human aesthetic values, electromagnetic fields? How would they be maintained? What would the cables coming ashore do to affect the local ground water? How much electricity would they generate, and what effect would this have on a local electric co-op?

These and dozens more questions were aired during a two hour session. All those concerns were carefully recorded, and all will be addressed as part of the EIS. The Corps will continue to seek scoping comments until April 2, 2010. To comment or to find complete information about the project, go to [http://www.saw.usace.army.mil/WETLANDS/Projects/Duke\\_Wind/index.html](http://www.saw.usace.army.mil/WETLANDS/Projects/Duke_Wind/index.html)



# Hike Responsibly

## TRAVEL RESPONSIBLY

Travel responsibly on designated roads, trails or areas.

- ✓ Stay on the trail even if it is rough and muddy. Walking on the track edge and cutting switchbacks increase damage, causing erosion and visual scarring.
- ✓ Walk single file to avoid widening the trail.
- ✓ Spread out in open country where there are no trails. Spreading out, rather than following each other's footsteps, disperses impact and avoids creating a new trail.
- ✓ Flagging and marking trails is unsightly. If flagging is necessary, remove it as you leave. Consider using a Global Positioning System (GPS) instead of flagging.
- ✓ Comply with all signs and respect barriers.
- ✓ Buddy up with two or three hikers, reducing vulnerability if you have an accident.

## RESPECT THE RIGHTS OF OTHERS

Respect the rights of others, including private property owners, all recreational trail users, campers and others so they can enjoy their recreational activities undisturbed.

- ✓ Be considerate of others on the road or trail.
- ✓ Leave gates as you find them.
- ✓ If crossing private property, be sure to ask permission from the landowner(s).
- ✓ Keep the noise down.
- ✓ Proceed with caution around horses and pack animals. Sudden, unfamiliar activity may spook animals—possibly causing injury to animals, handlers, and others on the trail.
- ✓ When encountering horses on the trail, move to the downhill side of the trail, stop, and ask the rider the best way to proceed.
- ✓ Keep your pets under control; this protects your pet, other recreationists and wildlife.

## AVOID SENSITIVE AREAS

Avoid sensitive areas such as meadows, lakeshores, wetlands and streams. Stay on designated routes.

- ✓ Other sensitive habitats to avoid include cryptobiotic soils of the desert, tundra, and seasonal nesting or breeding areas.
- ✓ Do not disturb historical, archeological, or paleontological sites.
- ✓ Avoid "spooking" livestock and wildlife you encounter and keep your distance.
- ✓ Motorized and mechanized vehicles are not allowed in designated Wilderness Areas.

## DO YOUR PART

Do your part by modeling appropriate behavior, leaving the area better than you found it, properly disposing of waste, minimizing the use of fire, avoiding the spread of invasive species, and restoring degraded areas.

- ✓ Carry a trash bag and pick up litter left by others.
- ✓ Pack out what you pack in.
- ✓ Repackage snacks and food in baggies. This reduces weight and the amount of trash to carry out.
- ✓ In areas without toilets, use a portable waste bag if possible and pack out your waste, otherwise, it's necessary to bury your waste. Human waste should be disposed of in a shallow hole (6"-8" deep) at least 200 feet from water sources, campsites, or trails. Cover and disguise the hole with natural materials. It is recommended to pack out your toilet paper. High-use areas may have other restrictions so check with a land manager.
- ✓ Take a small bag and pack out your pet's waste, especially in front country areas or if it is left on or near trails or trailhead areas.
- ✓ Before and after a hike, wash your gear and support vehicle to reduce the spread of invasive species.
- ✓ Build a trail community. Get to know other types of recreationists that share your favorite trail.



## FOREST WORDSEARCH

Search for the words below in this puzzle and circle them. They may be spelled forwards or backwards, and placed vertically, horizontally or diagonally.

D E S C A L O N I G X T L A S E W A T I R O O B  
 B F I R E P L A C E C G Q C H O A B B E E L U N  
 J D E N L U E X K Y L S K Y O W L K R H N F S O  
 E L O P R I A N E S E S L D S H A K E S P I A R  
 R E I A Q U V K R T L K Y K E N B R W K R R P I  
 M N E D N K E J O N E S O R A V E S M O K E N W  
 I F L X L N S I E M P R E M N Y T O U R S F U T  
 O O D E T F I R O U T G L O S R I V I L O I K P  
 L S E R V I C D O O H R O B H G I E N F N G D R  
 L A N G R A N G E R S N A N T H A N W O F H K P  
 F G N D I S T G A N C E H L P E E R F I L T R D  
 L N E B A R A R U E G A D S P A R K O R C E T O  
 A I N R O K E N J I E S U S A E B O E L V R K R  
 N R B I A N I M A L S W F T I N U T V E B G O L  
 D E E Y R U L F N O T H A I R Y A M N C A L I F  
 E R R C O M I B I A T O E N R W Q T E P R D O G  
 R I G M E S T I C G E K A R L G I H F N J H N U  
 S F O A G I L B F I R A S A F O E N I E G T B T  
 B O O K U L M A K S H Y L O N L A M R I K J E T  
 N R H M I A F E N O S R A R M O T R E E S N D E  
 F U A D T E N K O G N S E Y E L Y O W S M O K R  
 O S R C O Q G S T I N G B I E R O N O G K A N S  
 R N H I R G N I N R U B O V K C R T R O O F E B  
 E E A O K N U V S L Y C O E A R F E K F R A W I  
 S B E N M O N E D A L H K B F B N U S D V G O K  
 T B R I H E C E L L S O S L O W S E M A L F L R

Fireplace  
 Leaves  
 Extinguisher  
 Fire Ring  
 Neighborhood  
 Wood  
 Shakes

Rake  
 Firefighter  
 Flames  
 Gutters  
 Burning  
 Shovel  
 Smoke

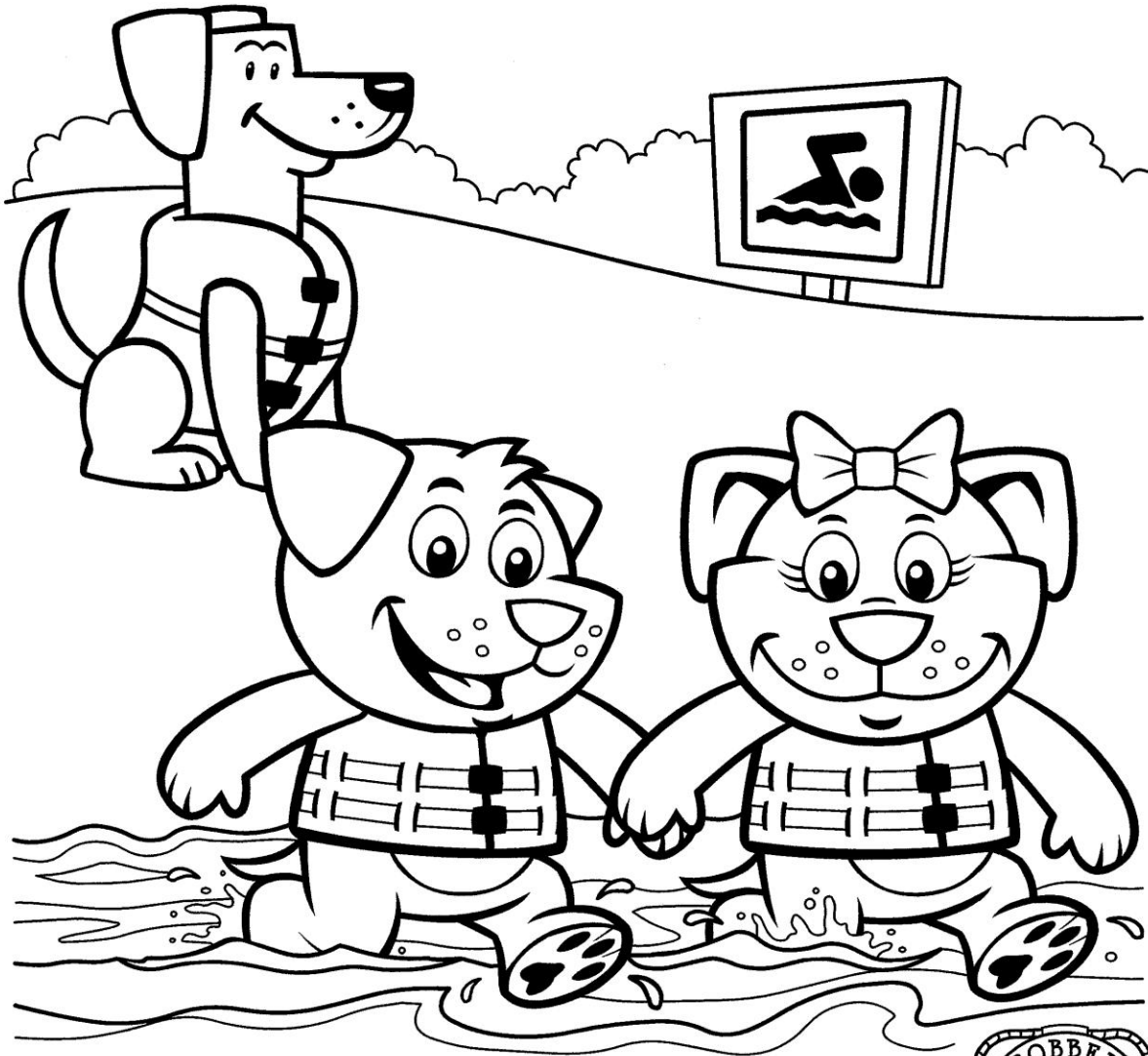
Trees  
 Home  
 Matches  
 Spark  
 Smokey  
 Arson  
 Fireworks

Animals  
 Water  
 Prevention  
 Hose  
 Forest  
 Rangers  
 Roof



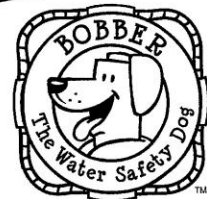
# ALWAYS SWIM WITH A BUDDY, NEVER ALONE!

Have an adult watch you.



¡SIEMPRE NADEN CON UN COMPAÑERO,  
NUNCA SOLO!

Tenga un adulto que lo cuide.



Bobber.info

Produced by the US Army Corps of Engineers, for more information visit <http://watersafety.usace.army.mil>

# Youth Fishing Day - Book Swap April 17, 2010





# Calendar of Events

<b>May 20 (9:00 a.m.)</b>	<b>Rubbish Roundup (Meet at Dam Site Boat Ramp)</b> <b>POC: Jory Shepherd</b>
<b>May 28-30</b>	<b>24 Hour Burn Bike Race – Dark Mountain Park</b>
<b>June 3 and 17</b>	<b>Rubbish Roundup</b>
<b>July 1</b>	<b>Rubbish Roundup</b>
<b>July 1 (8:30 p.m.)</b>	<b>Opening Night Tom Dooley, Fort Hamby Park</b> <a href="http://www.wilkesplaymakers.com/home.asp">http://www.wilkesplaymakers.com/home.asp</a>

Rubbish Roundup is a program which began in 2009. During the months of April through October, Rangers and volunteers go out twice a month (if possible) on the lake and remove litter. On April 22, 2010 we removed 55 bags of litter and 16 tires! Not bad for 14 volunteers in 3 hours! We still have a lot more litter to remove. Any volunteers are greatly appreciated.

## Contact Information

### U.S. Army Corps of Engineers

W. Kerr Scott Dam and Reservoir  
499 Reservoir Road  
Wilkesboro, NC 28697  
336-921-3390  
336-921-2330 (Fax)  
Email: [jory.d.shepherd@usace.army.mil](mailto:jory.d.shepherd@usace.army.mil)  
Web: <http://www.saw.usace.army.mil/wkscott/index.htm>

### Friends of W. Kerr Scott Lake

W. Kerr Scott Dam and Reservoir  
499 Reservoir Road  
Wilkesboro, NC 28697  
336-921-3390  
336-921-2330 (Fax)  
Email: [wkerrscott1@yahoo.com](mailto:wkerrscott1@yahoo.com)  
Web: <http://www.friendsoflake.org/>



# Shoreline Watch Program

If you observe a violation of the Shoreline Management Plan; you may anonymously call or send a letter to the shoreline ranger at:

**W. Kerr Scott Lake**  
**Attn: Shoreline Ranger**  
**499 Reservoir Road**  
**Wilkesboro, NC 28697**  
**336-921-3390**

- You may leave a comment on our webpage at:  
<http://www.saw.usace.army.mil/wkscott/index.htm>

If you suspect water quality violations you may report it directly to:

**NC Department of Natural Resources (Water Quality Section)**  
**336-771-5000**

<http://portal.ncdenr.org/web/wq/home>

